

# HF504

## Metalized Heat Sealable Film



METALLIZED BOPP FILM

**DESCRIPTION :**

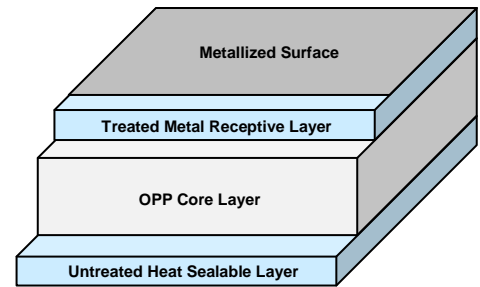
**Gulf Pack HF504** is a heat sealable film, one side treated and metallized with high purity aluminum; other side untreated.

**PRODUCT FEATURES :**

- One side aluminum coated
- Excellent metal adhesion & web flatness
- Good optical density
- Outstanding barrier to moisture, gas & odors.
- Excellent light barrier enhances shelf life
- Good seal strength on non-metallized side
- Good resistance to oils, fats & flex cracking

**APPLICATIONS :**

- As inner web for adhesive lamination
- Packaging for moisture & odor sensitive food stuffs as coffee, snack foods, chips, cookies, etc.
- Surface printed for ice cream and candy over wrap
- Specialty as gift wrap & flower designing



PROPERTIES		UNIT	TYPICAL VALUES					TEST METHOD.
PHYSICAL	Thickness	Microns	15	18	20	25	30	ASTM D 374
		Gauge	60	72	80	100	120	
	Grammage	g/m <sup>2</sup>	13.65	16.38	18.20	22.75	27.30	*GPIM
		lbs/ream	8.4	10.1	11.2	14.0	16.8	
	Yield	m <sup>2</sup> /kg	73.26	61.05	54.95	43.96	36.63	
		in <sup>2</sup> /lb	51,600	43,000	38,700	31,000	25,800	
Coefficient of Friction (Film/Film)			0.35					ASTM D 1894
Surface Tension (Treated Side)		dynes/cm	38					ASTM D 2578
OPTICAL	Optical Density	%	2.0					GPIM
MECHANICAL	Tensile Strength at Break	*MD	15					ASTM D 882
		*TD	27					
		MD	21,330					
		TD	38,394					
	Elongation at Break	MD	170					ASTM D 882
		TD	50					
THERMAL	Thermal Shrinkage	MD	< 4.0					GPIM (120°C (248°F), 5 min, air)
		TD	< 2.0					
	Heat Seal Range	°C (°F)	105 – 140 (221 – 284)					GPIM
	Heat Seal Strength (Film/Film)	g/15mm	275					GPIM (130°C, 1bar, 1sec)
lb/0.59in		0.60					GPIM (266°F, 14.5psi, 1 sec)	
BARRIER	Water Vapor Permeability (W.V.T.R.)	g/m <sup>2</sup> /24h	0.80					ASTM F 1249 (38°C / 90% RH)
		g/100in <sup>2</sup> /24h	0.051					
	Oxygen Transmission Rate (O.T.R.)	cc/m <sup>2</sup> /24h	90					ASTM D 3985 (23°C / 0% RH)
		cc/in <sup>2</sup> /24h	5.80					

\* GPIM – Gulf Pack Internal Method

\*MD – Machine Direction

\*TD – Transverse Direction

**Gulf Pack HF504** films comply with EU Regulation 10/2011/EC and USA FDA Code of Federal Regulations CFR21 section 177.1520 (c) 1.1 and are suitable for use in packaging, carrying and transporting foodstuffs.

The information contained in this technical leaflet illustrates typical values only and are to the best of our knowledge. Since the conditions under which our films may be used are beyond our control, such values are declared without warranty or guarantee.

Bi-axially oriented polypropylene films age with time and will exhibit deterioration of some properties if not stored in a suitable environment at a temperature 30°C or below. We strongly advise our customers to use recommended storage conditions and consume products before 3 months from date of production in our plant.

**Gulf Pack HF504** standard surface treatment location is on the outer side (O); other treatment preference can be arranged upon agreement with the sales representative before order processing.

Detailed advice regarding other specific applications of **Gulf Pack HF504** and other films in the Gulf Pack range is available upon request.